ability Act (HIPAA); whereas health data in other countries may be subject to other regulations and policies and should be handled accordingly. Hence different privacy practices should be maintained for different personal data types in each country.

[0199] Despite the foregoing, the present disclosure also contemplates embodiments in which users selectively block the use of, or access to, personal information data. That is, the present disclosure contemplates that hardware and/or software elements can be provided to prevent or block access to such personal information data. For example, in the case of progress tracking services, the present technology can be configured to allow users to select to "opt in" or "opt out" of participation in the collection of personal information data during registration for services or anytime thereafter. In another example, users can select not to provide progress tracking information for specific third-party applications. In yet another example, users can select to limit the scope of data that is collected or entirely prohibit the collection of progress tracking information. In addition to providing "opt in" and "opt out" options, the present disclosure contemplates providing notifications relating to the access or use of personal information. For instance, a user may be notified upon downloading an app that their personal information data will be accessed and then reminded again just before personal information data is accessed by the app.

[0200] Moreover, it is the intent of the present disclosure that personal information data should be managed and handled in a way to minimize risks of unintentional or unauthorized access or use. Risk can be minimized by limiting the collection of data and deleting data once it is no longer needed. In addition, and when applicable, including in certain health related applications, data de-identification can be used to protect a user's privacy. De-identification may be facilitated, when appropriate, by removing specific identifiers (e.g., date of birth, etc.), controlling the amount or specificity of data stored (e.g., collecting location data a city level rather than at an address level), controlling how data is stored (e.g., aggregating data across users), and/or other methods.

[0201] Therefore, although the present disclosure broadly covers use of personal information data to implement one or more various disclosed embodiments, the present disclosure also contemplates that the various embodiments can also be implemented without the need for accessing such personal information data. That is, the various embodiments of the present technology are not rendered inoperable due to the lack of all or a portion of such personal information data. For example, progress tracking can be implemented based on non-personal information data or a bare minimum amount of personal information, such as other non-personal information available to the progress tracking pipeline, or publicly available information.

[0202] The various aspects, embodiments, implementations or features of the described embodiments can be used separately or in any combination. Various aspects of the described embodiments can be implemented by software, hardware or a combination of hardware and software. The described embodiments can also be embodied as computer readable code on a non-transitory computer readable medium. The non-transitory computer readable medium is any data storage device that can store data which can thereafter be read by a computer system. Examples of the non-transitory computer readable medium include read-only memory, random-access memory, CD-ROMs, HDDs, DVDs, magnetic tape, and optical data storage devices. The non-transitory computer readable medium can also be distributed over network-coupled computer systems so that the computer readable code is stored and executed in a distributed fashion.

[0203] The foregoing description, for purposes of explanation, used specific nomenclature to provide a thorough understanding of the described embodiments. However, it will be apparent to one skilled in the art that the specific details are not required in order to practice the described embodiments. Thus, the foregoing descriptions of specific embodiments are presented for purposes of illustration and description. They are not intended to be exhaustive or to limit the described embodiments to the precise forms disclosed. It will be apparent to one of ordinary skill in the art that many modifications and variations are possible in view of the above teachings.

What is claimed is:

1. A method for tracking student activity on a client device, the method comprising:

by a background process executing on the client device:

receiving progress tracking information related to student activities from one or more applications on the client device;

filtering the progress tracking information to generate filtered progress tracking information;

storing the filtered progress tracking information in a remote database;

generating metadata associated with the filtered progress tracking information; and

transmitting the metadata to at least one service accessible by the client device over a network.

2. The method of claim **1**, wherein each application in the one or more applications implements at least a portion of a software framework that causes the application to generate application programming interface (API) calls to the background process in response to operations performed within the application.

3. The method of claim **1**, wherein filtering the progress tracking information comprises:

determining whether progress tracking is enabled or disabled for each of the one or more applications; and

discarding the progress tracking information when the progress tracking information is received from any applications for which progress tracking is disabled, or

processing the progress tracking information when the progress tracking information is received from any applications for which progress tracking is enabled to generate the filtered progress tracking information.

4. The method of claim **1**, wherein filtering the progress tracking information comprises:

receiving a list of active contexts associated with the one or more applications;

comparing a context identifier included in the progress tracking information to the list of active contexts; and

discarding the progress tracking information when the context identifier is not included in the list of active contexts, or

processing the progress tracking information when the context identifier is included in the list of active contexts to generate the filtered progress tracking information.